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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/731,558

DATE: 04/29/2002
TIME: 14:41:09

Input Set : A:\seqlist.txt
Output Set: N:\CRF3\04292002\I731558.raw

ENTERED

```
 3 <110> APPLICANT: Case, Casey Christopher
 4        Liu, Qiang
 5        Rebar, Edward J.
 6        Sangamo Biosciences, Inc.
 8 <120> TITLE OF INVENTION: Methods of Using Randomized Libraries of Zinc Finger
 9        Proteins for the Identification of Gene Function
11 <130> FILE REFERENCE: 019496-003210US
13 <140> CURRENT APPLICATION NUMBER: US 09/731,558
14 <141> CURRENT FILING DATE: 2000-12-06
16 <150> PRIOR APPLICATION NUMBER: US 09/456,100
17 <151> PRIOR FILING DATE: 1999-12-06
19 <160> NUMBER OF SEQ ID NOS: 24
21 <170> SOFTWARE: PatentIn Ver. 2.1
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 25
25 <212> TYPE: PRT
26 <213> ORGANISM: Artificial Sequence
28 <220> FEATURE:
29 <221> NAME/KEY: MOD_RES
30 <222> LOCATION: (2)..(5)
31 <223> OTHER INFORMATION: Xaa = any amino acid, Xaa at positions 4 and 5 may
32        be present or absent
34 <220> FEATURE:
35 <221> NAME/KEY: MOD_RES
36 <222> LOCATION: (7)..(18)
37 <223> OTHER INFORMATION: Xaa = any amino acid
39 <220> FEATURE:
40 <221> NAME/KEY: MOD_RES
41 <222> LOCATION: (20)..(24)
42 <223> OTHER INFORMATION: Xaa = any amino acid, Xaa at positions 23 and 24
43        may be present or absent
45 <220> FEATURE:
46 <223> OTHER INFORMATION: Description of Artificial Sequence:exemplary motif
47        for Cys-2His-2 class of zinc finger proteins
49 <400> SEQUENCE: 1
50 Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
51   1               5                   10                  15
53 Xaa Xaa His Xaa Xaa Xaa Xaa Xaa His
54               20                  25
57 <210> SEQ ID NO: 2
58 <211> LENGTH: 5
59 <212> TYPE: PRT
60 <213> ORGANISM: Artificial Sequence
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62 <220> FEATURE:
63 <223> OTHER INFORMATION: Description of Artificial Sequence:polypeptide
64        linker
66 <400> SEQUENCE: 2
67 Asp Gly Gly Gly Ser
68    1                5
71 <210> SEQ ID NO: 3
72 <211> LENGTH: 5
73 <212> TYPE: PRT
74 <213> ORGANISM: Artificial Sequence
76 <220> FEATURE:
77 <223> OTHER INFORMATION: Description of Artificial Sequence:flexible
78        polypeptide linker
80 <400> SEQUENCE: 3
81 Thr Gly Glu Lys Pro
82    1                5
85 <210> SEQ ID NO: 4
86 <211> LENGTH: 9
87 <212> TYPE: PRT
88 <213> ORGANISM: Artificial Sequence
90 <220> FEATURE:
91 <223> OTHER INFORMATION: Description of Artificial Sequence:polypeptide
92        linker
94 <400> SEQUENCE: 4
95 Leu Arg Gln Lys Asp Gly Glu Arg Pro
96    1                5
99 <210> SEQ ID NO: 5
100 <211> LENGTH: 4
101 <212> TYPE: PRT
102 <213> ORGANISM: Artificial Sequence
104 <220> FEATURE:
105 <223> OTHER INFORMATION: Description of Artificial Sequence:polypeptide
106        linker
108 <400> SEQUENCE: 5
109 Gly Gly Arg Arg
110    1
113 <210> SEQ ID NO: 6
114 <211> LENGTH: 5
115 <212> TYPE: PRT
116 <213> ORGANISM: Artificial Sequence
118 <220> FEATURE:
119 <223> OTHER INFORMATION: Description of Artificial Sequence:polypeptide
120        linker
122 <400> SEQUENCE: 6
123 Gly Gly Gly Gly Ser
124    1                5
127 <210> SEQ ID NO: 7
128 <211> LENGTH: 8
129 <212> TYPE: PRT
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130 <213> ORGANISM: Artificial Sequence
132 <220> FEATURE:
133 <223> OTHER INFORMATION: Description of Artificial Sequence:polypeptide
134       linker
136 <400> SEQUENCE: 7
137 Gly Gly Arg Arg Gly Gly Gly Ser
138    1              5
141 <210> SEQ ID NO: 8
142 <211> LENGTH: 9
143 <212> TYPE: PRT
144 <213> ORGANISM: Artificial Sequence
146 <220> FEATURE:
147 <223> OTHER INFORMATION: Description of Artificial Sequence:polypeptide
148       linker
150 <400> SEQUENCE: 8
151 Leu Arg Gln Arg Asp Gly Glu Arg Pro
152    1              5
155 <210> SEQ ID NO: 9
156 <211> LENGTH: 12
157 <212> TYPE: PRT
158 <213> ORGANISM: Artificial Sequence
160 <220> FEATURE:
161 <223> OTHER INFORMATION: Description of Artificial Sequence:polypeptide
162       linker
164 <400> SEQUENCE: 9
165 Leu Arg Gln Lys Asp Gly Gly Gly Ser Glu Arg Pro
166    1              5                   10
169 <210> SEQ ID NO: 10
170 <211> LENGTH: 16
171 <212> TYPE: PRT
172 <213> ORGANISM: Artificial Sequence
174 <220> FEATURE:
175 <223> OTHER INFORMATION: Description of Artificial Sequence:polypeptide
176       linker
178 <400> SEQUENCE: 10
179 Leu Arg Gln Lys Asp Gly Gly Gly Ser Gly Gly Gly Ser Glu Arg Pro
180    1              5                   10                  15
183 <210> SEQ ID NO: 11
184 <211> LENGTH: 6
185 <212> TYPE: PRT
186 <213> ORGANISM: Artificial Sequence
188 <220> FEATURE:
189 <223> OTHER INFORMATION: Description of Artificial Sequence:6xHis tag
191 <400> SEQUENCE: 11
192 His His His His His His
193    1              5
196 <210> SEQ ID NO: 12
197 <211> LENGTH: 7
198 <212> TYPE: PRT
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Input Set : A:\seqlist.txt
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199 <213> ORGANISM: Artificial Sequence
201 <220> FEATURE:
202 <223> OTHER INFORMATION: Description of Artificial Sequence:SBS1
203   recognition helix
205 <400> SEQUENCE: 12
206 Arg Ser Asp Ala Leu Thr Arg
207   1   5
210 <210> SEQ ID NO: 13
211 <211> LENGTH: 7
212 <212> TYPE: PRT
213 <213> ORGANISM: Artificial Sequence
215 <220> FEATURE:
216 <223> OTHER INFORMATION: Description of Artificial Sequence:SBS2
217   recognition helix
219 <400> SEQUENCE: 13
220 Arg Ser Asp Asn Leu Ala Arg
221   1   5
224 <210> SEQ ID NO: 14
225 <211> LENGTH: 7
226 <212> TYPE: PRT
227 <213> ORGANISM: Artificial Sequence
229 <220> FEATURE:
230 <223> OTHER INFORMATION: Description of Artificial Sequence:SBS3
231   recognition helix
233 <400> SEQUENCE: 14
234 Arg Ser Asp His Leu Ser Arg
235   1   5
238 <210> SEQ ID NO: 15
239 <211> LENGTH: 7
240 <212> TYPE: PRT
241 <213> ORGANISM: Artificial Sequence
243 <220> FEATURE:
244 <223> OTHER INFORMATION: Description of Artificial Sequence:SBS4
245   recognition helix
247 <400> SEQUENCE: 15
248 Arg Ser Asp Glu Leu Thr Arg
249   1   5
252 <210> SEQ ID NO: 16
253 <211> LENGTH: 7
254 <212> TYPE: PRT
255 <213> ORGANISM: Artificial Sequence
257 <220> FEATURE:
258 <223> OTHER INFORMATION: Description of Artificial Sequence:SBS5
259   recognition helix
261 <400> SEQUENCE: 16
262 Gln Ser Gly Ser Leu Thr Arg
263   1   5
266 <210> SEQ ID NO: 17
267 <211> LENGTH: 7

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268 <212> TYPE: PRT
269 <213> ORGANISM: Artificial Sequence
271 <220> FEATURE:
272 <223> OTHER INFORMATION: Description of Artificial Sequence:SBS6
273      recognition helix
275 <400> SEQUENCE: 17
276 Gln Ser Ser Asp Leu Thr Arg
277    1                5
280 <210> SEQ ID NO: 18
281 <211> LENGTH: 7
282 <212> TYPE: PRT
283 <213> ORGANISM: Artificial Sequence
285 <220> FEATURE:
286 <223> OTHER INFORMATION: Description of Artificial Sequence:SBS7
287      recognition helix
289 <400> SEQUENCE: 18
290 Glu Arg Gly Thr Leu Ala Arg
291    1                5
294 <210> SEQ ID NO: 19
295 <211> LENGTH: 7
296 <212> TYPE: PRT
297 <213> ORGANISM: Artificial Sequence
299 <220> FEATURE:
300 <223> OTHER INFORMATION: Description of Artificial Sequence:SBS8
301      recognition helix
303 <400> SEQUENCE: 19
304 Gln Ser Ser Asn Leu Ala Arg
305    1                5
308 <210> SEQ ID NO: 20
309 <211> LENGTH: 7
310 <212> TYPE: PRT
311 <213> ORGANISM: Artificial Sequence
313 <220> FEATURE:
314 <223> OTHER INFORMATION: Description of Artificial Sequence:SBS9
315      recognition helix
317 <400> SEQUENCE: 20
318 Asp Arg Ser Asn Leu Thr Arg
319    1                5
322 <210> SEQ ID NO: 21
323 <211> LENGTH: 7
324 <212> TYPE: PRT
325 <213> ORGANISM: Artificial Sequence
327 <220> FEATURE:
328 <223> OTHER INFORMATION: Description of Artificial Sequence:SBS10
329      recognition helix
331 <400> SEQUENCE: 21
332 Gln Ser Gly Asn Leu Ala Arg
333    1                5
336 <210> SEQ ID NO: 22
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 04/29/2002
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<u>Please Note:</u>
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 2,3,4,5,7,8,9,10,11,12,13,14,15,16,17,18,20,21,22,23,24

VERIFICATION SUMMARY   DATE: 04/29/2002
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L:50 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:53 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:16